

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)		
)		
Lei Duan, et al.)	Examiner:	Unassigned
)		
Serial No.: Unassigned)	Art Unit:	Unassigned
)		
Filed: Unassigned)		
)		
For: METHOD AND APPARATUS FOR REDUCING)		
LEXICAL AMBIGUITY OF AN INPUT)		
SENTENCE PROCESSED BY A NATURAL)		
LANGUAGE TRANSLATION SYSTEM)		
)		
Which is a continuation of:)		
)		
Serial No. 09/420,517)		
)		
Filed: October 18, 1999)		

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

Applicant hereby request consideration of the enclosed Information Disclosure Statement pursuant to 37 C.F.R. § 1.97(c).

Attached are the PTO Forms 1449 and Form 892 from the parent application filed on October 18, 1999, (Serial No. 09/420,517). This previous application is relied upon for an earlier filing date under 35 U.S.C. 120.

Pursuant to C.F.R. 1.98(d), copies of the references are not being provided herewith since they were previously sent to the patent and Trademark Office. Please consider theses cited documents in the currently pending 1.53(b) divisional application filed October 19, 1999.

Pursuant to 37 C.F.R. § 1.97, the submission of this Information Disclosure Statement is not to be construed as a representation that a search has been made and is not to be construed as an admission that the information cited in this statement is material to patentability.

If there are any additional charges, please charge Deposit Account No. 02-2666.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Dated: February 17, 2004



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Reg. No. 45,750

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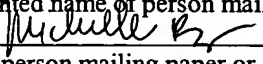
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Substitute for Form 1449A/PTO (Modified)

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

OCT 27 2003

STATEMENT BY APPLICANT

(use as many sheets as necessary)

OCT 27 2003

Sheet

of

3

Complete if Known

Application Number	09/420,517
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Filing Date	10/18/99
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First Named Inventor: Duan

Group Art Unit	2654
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Examiner Name	Edouard, P.
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Attorney Docket Number	80398.P276
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U.S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

[illegible]

Examiner
Signature

Alfred & Edmund

Date Considered _____

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard S.3). ⁴For Japanese patent documents, the indication of the year of reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

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Application Number	09/420,517
Filing Date	10/18/99
First Named Inventor:	Duan, et al.
Group Art Unit	2654
Examiner Name	Edouard, P.
Attorney Docket Number	80398.P270

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Examiner
Signature

PATRICK N. EDUARD

Date Considered

09/27/03

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Notice of References CitedApplication/Control No.
09/420,517Applicant(s)/Patent Under Reexam
DUAN ET ALExaminer
Patrick N. EdouardArt Unit
2654

Page 1 of 1

U.S. PATENT DOCUMENTS

	Document Number Country Code-Number-Kind Code	Date MM-YYYY ¹	Name	Classification ²	
A	5,528,491	6/1996	KUNO ET AL	704	9
B	5,642,519 ✓	6/1997	MARTIN	704	275
C					
D					
E					
F					
G					
H					
I					
J					
K					
L					
M					

FOREIGN PATENT DOCUMENTS

	Document Number Country Code-Number-Kind Code	Date MM-YYYY ¹	Country	Name	Classification ²	
N						
O						
P						
Q						
R						
S						
T						

NON-PATENT DOCUMENTS

	Include, as applicable: Author, Title, Date, Publisher, Edition or Volume, Pertinent Pages
U	
V	
W	
X	

¹ A copy of this reference is not being furnished with this Office action. See MPEP § 707.05(a).¹ Dates in MM-YYYY format are publication dates.² Classifications may be U.S. or foreign.

Substitute for Form 1449A/PTO (Modified) (use as many sheets as necessary)	Attorney Docket No.: 80398.P276	Application Number: 09/420,517
Confirmation No. 9749	First Named Inventor: Lei Duan, et al.	Examiner: Unassigned
	Filing Date: October 18, 1999	Art Unit: 2747

U.S. PATENT DOCUMENTS

Exam. Initial*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (If known)			
	/	5,033,087		Bahl et al.	07-16-1991	
	/	6,212,500	B1	Köhler	04-03-2001	
	/	6,230,153	B1	Howard et al.	05-08-2001	
	/	6,243,669	B1	Horiguchi et al.	06-05-2001	
	/	6,330,530	B1	Horiguchi et al.	12-11-2001	

FOREIGN PATENT DOCUMENTS

Exam. Initial*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Office ³	Number ⁴	Kind Code ⁵ (If known)				

Examiner Signature		Date Considered	
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¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two-letter code (WIPO Standard S.3). ⁴For Japanese patent documents, the indication of the year of reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

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Form PTO-1449

INFORMATION DISCLOSURE
CITATION

Atty Docket No.:

80398.P276

Serial No.:

09/420,517

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Technology Center 2600List of Patents and Publications Statement
(Use several sheets if necessary)

Applicant:

Lei Duan, et al.

Filing Date: October 18, 1999

U.S. PATENT DOCUMENTS

Examiner Initials		Document No.	Patentee	Class	Sub- Class	Filing date if appropriate
OE	AA	4,974,191	Siamak Amirbodsi, et al.	364	900	07/31/1987
OE	AB	5,418,717	Key-Yih Su, et al.	364	419.08	12/12/1991
OE	AC	5,677,835	Jaime G. Carbonell, et al.	364	419.02	12/22/1994
OE	AD	5,799,268	Branimir K. Boguraev	704	9	09/28/1994
OE	AE	5,806,021	Chengjun Julian Chen, et al.	704	9	09/04/1996
OE	AF	5,864,788	Takeshi Kutsumi	704	2	05/26/1995
OE	AG	5,873,056	Elizabeth D. Liddy, et al.	704	9	10/12/1993
OE	AH	5,963,894	Stephen D. Richardson, et al.	704	9	05/20/1997

FOREIGN PATENT DOCUMENTS

No.		Document No.	Date	Country	Class	Sub- Class	Trans- lation

OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)

OE	AI	PCT Search Report dated April 4, 2001, 4 pages.
OE	AJ	PCT Search Report dated February 22, 2001, 5 pages.

Examiner

PATRICK H. EDWARDS

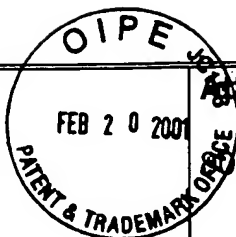
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Form PTO-1449 INFORMATION DISCLOSURE CITATION		Atty Docket No.: 80398.P276		Serial No.: 09/420,517			
List of Patents and Publications Statement (Use several sheets if necessary)		Applicant: Lei Duan, et al. Filing Date: October 18, 1999					
U.S. PATENT DOCUMENTS							
Examiner Initials		Document No.	Patentee	Class	Sub- Class	Filing date if appropriate	
	AA	4,974,191	Siamak Amirgobdosi, et al.	364	900	07/31/1987	
	AB	5,418,717	Key-Yih Su, et al.	364	419.08	12/12/1991	
	AC	5,677,835	Jaime G. Carbonell, et al.	364	419.02	12/22/1994	
	AD	5,799,268	Branimir K. Boguraev	704	9	09/28/1994	
	AE	5,806,021	Chengjun Julian Chen, et al.	704	9	09/04/1996	
	AF	5,864,788	Takeshi Kutsumi	704	2	05/26/1995	
	AG	5,873,056	Elizabeth D. Liddy, et al.	704	9	10/12/1993	
	AH	5,963,894	Stephen D. Richardson, et al.	704	9	05/20/1997	
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	AJ	PCT Search Report dated February 22, 2001, 5 pages.					
Examiner				Date Considered			
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INFORMATION DISCLOSURE
CITATION

Appy Docket No.:

0398P276

Serial No.:

09/420,517

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List of Patents and Publications Statement
(Use several sheets if necessary)Applicant:
Lei Duan, et al.

Filing Date: October 18, 1999

U.S. PATENT DOCUMENTS

Examiner Initials		Document No.	Patentee	Class	Sub-Class	Filing date if appropriate
<i>ME</i>	AA	5,088,038	Katumi Tanaka, et al.	364	419	05/24/1990
<i>ME</i>	AB	5,426,583	Gregorio Uribe-Echebarria Diaz De Mendiil	364	419.08	01/27/1994
<i>ME</i>	AC	5,510,981	Adam L. Berger, et al.	364	419.02	10/28/1993
<i>ME</i>	AD	5,528,491	Susumu Kuno, et al.	364	419.08	08/31/1992
<i>ME</i>	AE	5,535,120	Leighton K. Chong, et al.	364	419.03	06/07/1995
<i>ME</i>	AF	5,659,765	Seiji Nii	395	754	03/14/1995
<i>ME</i>	AG	5,768,603	Peter Fitzhugh Brown, et al.	395	759	06/02/1995
<i>ME</i>	AH	5,907,821	Hiroyuki Kaji, et al.	704	4	11/04/1996
<i>ME</i>	AI	5,983,169	John P. Kozma	704	2	11/13/1995
<i>ME</i>	AJ	6,161,083	Alexander Franz, et al.	704	4	04/24/1997

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No.		Document No.	Date	Country	Class	Sub-Class	Trans-lation
<i>ME</i>	AK	EPO 805 403 A2	May 2, 1997	EP			

OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)

<i>ME</i>	AL	PCT Search Report dated January 29, 2001, 6 pages.
<i>ME</i>	AM	PCT Search Report dated January 31, 2001, 5 pages.

Examiner

Patrick N. Edouard

Date Considered

10/10/92

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Form PTO-1449				Atty Docket No.:		Serial No.:	
INFORMATION DISCLOSURE CITATION				80398P276		09/420,517	
List of Patents and Publications Statement (Use several sheets if necessary)				Applicant: Lei Duan, et al.			
				Filing Date: October 18, 1999			

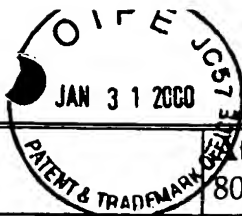
U.S. PATENT DOCUMENTS						
Examiner Initials		Document No.	Patentee	Class	Sub- Class	Filing date if appropriate
	AA /	5,088,038	Katumi Tanaka, et al.	364	419	05/24/1990
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	AE /	5,535,120	Leighton K. Chong, et al.	364	419.03	06/07/1995
	AF /	5,659,765	Seiji Nii	395	754	03/14/1995
	AG /	5,768,603	Peter Fitzhugh Brown, et al.	395	759	06/02/1995
	AH /	5,907,821	Hiroyuki Kaji, et al.	704	4	11/04/1996
	AI /	5,983,169	John P. Kozma	704	2	11/13/1995
	AJ /	6,161,083	Alexander Franz, et al.	704	4	04/24/1997

FOREIGN PATENT DOCUMENTS							
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	AK /	EPO 805 403 A2	May 2, 1997	EP			

OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)		
	AL	PCT Search Report dated January 29, 2001, 6 pages.
	AM	PCT Search Report dated January 31, 2001, 5 pages.

Examiner	Date Considered
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Form PTO-1449 (Modified)

Patty Docket No.:

80398.P276

Serial No.:

09/420,517

List of Patents and Publications Statement
(Use several sheets if necessary)

Applicants:

Duan et al.

Filing Date: October 18, 1999

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REFERENCE DESIGNATION

U.S. PATENT DOCUMENTS

Exam. Initial	Date	Document Number	Name	Class	Sub-Class	Filing Date

FOREIGN PATENT DOCUMENTS

No.	Document No.	Date	Country	Name	Class	Sub-Class	Translation

OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)

<i>PR</i>	S. Kurohashi, T. Nakamura, Y. Matsumoto, M. Nagao. Improvements of Japanese Morphological Analyzer JUMAN. In: "Proceedings of the International Workshop on Sharable Natural Language Resources", p. 22-28, Nara, Japan, 1994.
<i>PR</i>	Kenneth W. Church, "A Stochastic Parts Program and Noun Phrase Parser for Unrestricted Text", in Proceedings of the Second Applied Natural Language Processing Conference, Austin, TX, 1988.
<i>PR</i>	Edited by Karen Jensen, George E. Heidorn, Stephen D. Richardson, "Natural Language Processing: The PLNLP Approach", Kluwer Academic Publishers, 1993, 22 pages.
<i>PR</i>	Stuart M. Shieber, "An Introduction to Unification-based Approaches to Grammar, CSLI, 1986, 23 pages.
<i>PR</i>	M. Tomita, T. Mitamura, H. Musha, M. Kee, "The Generalized LR Parser/Compiler Version 8.1: User's Guide", CMU-CMT-88-MEMO, 20 April 1988, 44 pages.
<i>PR</i>	M. Tomita, K. Knight, "Pseudo-Unification and Full-Unification", CMU, 1987, 10 pages.
<i>PR</i>	M. Ishii, K. Ohta, H. Saito, "An Efficient Parser Generator for Natural Language", COLING 1994, 3 pages.
<i>PR</i>	O. Furuse, H. Iida, "An Example-Based Method for Transfer-Driven Machine Translation", Proceedings of the Conference on Theoretical and Methodological Issues in Machine Translation (TMI-92), 1992, p. 139-150.
<i>PR</i>	P. Resnik, "Using Information Content to Evaluate Semantic Similarity in a Taxonomy", Proceedings of the International Joint Conference on Artificial Intelligence (IJCAI-95), 1995.
<i>PR</i>	T. C. Bell, J. G. Cleary, I. H. Witten, "Text Compression", Prentice Hall, 1990, 19 pages.
<i>PR</i>	H. Maruyama, H. Watanabe, "Tree Cover Search Algorithm for Example-Based Translation", in Proceedings of the Fourth International Conference on Theoretical and Methodological Issues in Machine Translation" (TMI-92), 1992, p. 173-184.

Examiner

Patrick H. Edwards

Date Considered

02/19/02

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Form PTO-1449 (Modified)				Atty Docket No.: 80398.P276		Serial No.: 09/420,517	
List of Patents and Publications Statement (Use several sheets if necessary)				Applicants: Duan et al.			
				Filing Date: October 18, 1999			
REFERENCE DESIGNATION				U.S. PATENT DOCUMENTS			
Exam. Initial		Date	Document Number	Name		Class	Sub-Class
FOREIGN PATENT DOCUMENTS							
No.		Document No.	Date	Country	Name	Class	Sub-Class
OTHER ART (Including Author, Title, Date, Pertinent Pages, etc.)							
		S. Kurohashi, T. Nakamura, Y. Matsumoto, M. Nagao. Improvements of Japanese Morphological Analyzer JUMAN. In: "Proceedings of the International Workshop on Sharable Natural Language Resources", p. 22-28, Nara, Japan, 1994.					
		Kenneth W. Church, "A Stochastic Parts Program and Noun Phrase Parser for Unrestricted Text", in Proceedings of the Second Applied Natural Language Processing Conference, Austin, TX, 1988.					
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		Stuart M. Shieber, "An Introduction to Unification-based Approaches to Grammar, CSLI, 1986, 23 pages.					
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		O. Furuse, H. Iida, "An Example-Based Method for Transfer-Driven Machine Translation", Proceedings of the Conference on Theoretical and Methodological Issues in Machine Translation (TMI-92), 1992, p. 139-150.					
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Form PTO-1449 INFORMATION DISCLOSURE CITATION		Atty Docket No.: 080398.P276		Serial No.: 09/420,517			
List of Patents and Publications Statement (Use several sheets if necessary)		Applicant: Hawley K. Rising Filing Date: October 18, 1999					
U.S. PATENT DOCUMENTS							
Examiner Initials		Document No.	Patentee	Class	Sub- Class	Filing date if appropriate	
	✓	5,644,755	Suzanne M. Thompson, et al.			07-01-1997	
	✓	5,884,247	Sam Christy			03-16-1999	
	✓	6,301,554	Samuel T. Christy			10-09-2001	
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